M-AUDIO®

MIDISPORT

USB MIDI Interface

1X1
2X2
2X4
4X4

MIDI Interface

USB Compatable

Bus Powered

USER GUIDE

Table of Contents

Introduction

Thank you for purchasing a M-Audio MIDISPORT™ MIDI interface for USB-equipped PC and Macintosh computers. MIDISPORT's high speed Universal Serial Bus connection to the computer assures reliable and speedy transfer of MIDI data.

This manual covers the following products:

MIDISPORT 1x1 (1-In, 1-Out MIDI Interface)
MIDISPORT 2x2 (2-In, 2-Out MIDI Interface)
MIDISPORT 2x4 (2-In, 4-Out MIDI Interface)
MIDISPORT 4x4 (4-In, 4-Out MIDI Interface)

Follow the installation instructions in this manual and you will be up and running in no time. The MIDISPORT is self-powered and is installed externally to your computer, requiring no computer disassembly. Expansion is easy too—just plug in additional MIDISPORT units for more MIDI ports.

Please read the installation instructions thoroughly before physically installing your MIDISPORT. For software driver installation information please refer to the section "Software Installation."

MIDISPORT Product Features

The MIDISPORT USB MIDI Interface has the following features:

- MIDISPORT 1x1: 1-In, 1-Out MIDI Interface (16x16 MIDI channels)
- MIDISPORT 2x2: 2-In, 2-Out MIDI Interface (32x32 MIDI channels)
- MIDISPORT 2x4: 2-In, 4-Out MIDI Interface (32x64 MIDI channels)
- MIDISPORT 4x4: 4-In, 4-Out MIDI Interface (64x64 MIDI channels)
- High-speed connection to USB-equipped PC or Apple computers
- Windows XP, 2000, Me, and 98 —true Plug and Play compatible installation requires no IRQ, I/O Address or DMA channel setup
- Macintosh installation requires OS 9.2.2 or higher, OMS required for 9.2.2 only
- "MIDI Thru" push-button allows you to play your gear even when your computer is turned off, without having to disconnect cables (MIDISPORT 2x2 and 2x4 only)
- MIDI-In and MIDI-Out activity indicators for each port
- Self-powered—requires no external power supply
- Compact size
- Limited Lifetime Warranty

Package Contents

Included in the MIDISPORT package are:

- MIDISPORT Interface
- Software Driver CD-ROM with drivers for Windows XP, 2000, Me, and Windows 98 Second Edition, as well as Macintosh OS 9 and OS X
- One Standard USB A/B Cable for Mac or PC
- This manual

Product Overview

The MIDISPORT provides up to four independent MIDI input ports and up to four independent MIDI output ports, depending on which model you have. Each MIDI port supports 16 MIDI channels, therefore the MIDISPORT is capable of sending and receiving from 16 (1 port x 16 channels) to 64 (4 ports x 16) channels. MIDI is the acronym for Musical Instrument Digital Interface and is the protocol used when "MIDI" keyboards and devices that record and play back the "MIDI" information (computers and hardware "sequencers") communicate with each other. MIDI Interfaces such as the MIDISPORT are typically used to interface MIDI synthesizers with MIDI sequencing software.

The USB port uses powerful technology that allows easy connection to a "host" computer. It supports multiple USB peripheral devices running simultaneously—all without having to configure jumpers, I/O addresses or DMA channels.

On a PC—you must be running Windows XP, 2000, Me, or Windows 98 to properly install the MIDISPORT. Also, your motherboard must have native USB ports. It is possible for a motherboard to support USB and yet not have the physical port connectors installed. A simple USB back panel extender can be purchased at a computer supply store and can be installed easily to provide USB port connectors. It is recommended that during installation, you do not use a USB hub for connecting the MIDISPORT. Powered USB hubs can be used after the MIDISPORT is successfully installed.

On an Apple Computer—your OS must support USB and your computer must have on-board USB ports. All current Apple computers have on-board USB ports. M–Audio cannot guarantee performance of USB MIDI when a non-Apple PCI to USB host adapter card is used.

IMPORTANT: The OMS MIDI driver is provided for use with Mac OS 9.2.2. You MUST have a sequencer that supports OMS and have OMS properly installed in order to use the MIDISPORT (this does not apply to Mac OS X).

Getting Started

Here is an outline of the steps needed to begin using your MIDISPORT on either a Mac or a PC:

1. Install the MIDISPORT software (see "Software Installation"). Mac OS 9 users must first install OMS (included on CD or available by download from our MIDISPORT "Drivers" page).
2. Attach the MIDISPORT to your computer (see "Hardware Installation").
3. Hook your keyboards and sound modules to the MIDISPORT (see "Setting Up Your MIDI Studio").
4. Configure the MIDISPORT in your application software (see "Using the MIDISPORT in your Application Software").

Software Installation

Your MIDISPORT comes with software that allows it to communicate with your specific operating system and platform (PC or Mac). Please locate the operating system for your computer in this section and follow the instructions. MIDISPORT's "driver" software will load during this installation.

Your MIDISPORT has a USB connector for a standard USB cable, which is supplied with the unit. When you are asked to connect your MIDISPORT during the driver software installation, simply plug the "device end" of the USB cable into your MIDISPORT and plug the "computer end" of the cable into your computer's USB port. The "computer end" and "device end" can be easily identified by their size and shape.

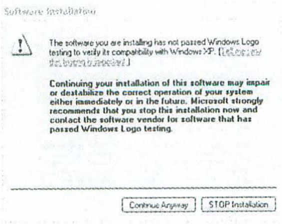
Windows XP

NOTE: The Windows XP Service Pack 1 is required for USB 2.0 equipped Computers.

1. Insert the M-Audio Drivers CD-ROM into your CD-ROM drive.
2. Open 'My Computer' or 'Windows Explorer' to locate your CD-ROM drive.
3. Double-click the CD-ROM drive that contains the M-Audio Drivers CD-ROM.
4. Double-click the 'MIDISPORT' folder.
5. Double-click the driver icon to launch the installation procedure.
6. You will see an installer window advising you to have your MIDISPORT DISCONNECTED from the USB bus before continuing. After you verify that your device is disconnected, click 'Next' to continue.



7. You will see a warning that this device has not passed Windows logo testing. Click "Continue anyway".



8. When the installer has completed installation, plug in your MIDISPORT.

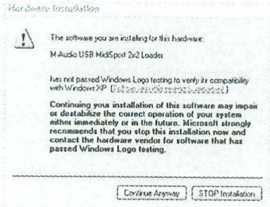


9. You will see a "New Hardware found" dialog. Click Next.



10. You will see another warning that the product has not passed Windows logo testing. Click

"Continue anyway".



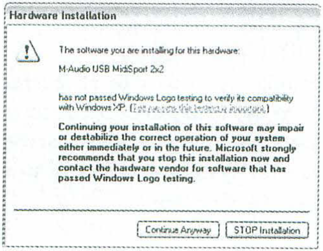
11. The installer will finish.



12. You will see another window telling you that New Hardware has been found. Click Next. Although the process seems redundant, the installer is actually installing different components of the MIDISPORT drivers with each iteration.



13. Again, the computer reminds you that the product has not passed Windows Logo testing. Click "Continue anyway".



14. The driver has been installed. Windows XP Installation is now complete.

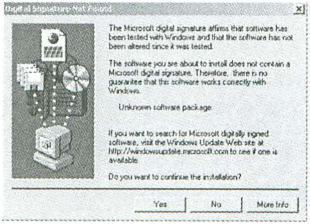


Windows 2000

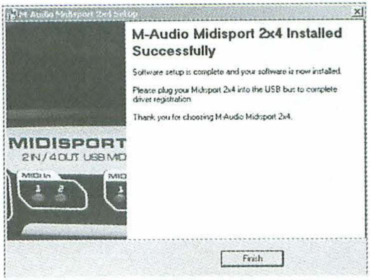
1. Service Pack 2 or higher is required for proper operation of the MIDISPORT driver. This service pack is available from Microsoft Downloads at www.microsoft.com/downloads.
2. Insert the M-Audio Driver CD into your CD-ROM drive.
3. Open 'My Computer' or 'Windows Explorer' to locate your CD-ROM drive.
4. Double-click the CD-ROM drive that contains the M-Audio Drivers CD-ROM.
5. Double-click the MIDISPORT Folder to open it.
6. Double-click on the MIDISPORT Installer icon
7. A dialog box will appear, reminding you to exit all currently running programs and to disconnect the MIDISPORT from the USB port. Check to make sure this is done and click "Next" to continue. The installer will then scan your hard drive, install the necessary files, and perform setup actions on your system. A series of progress bars will show you how the process is going (this can take some time).



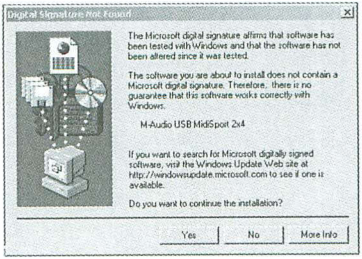
8. At the next prompt, the installer will notify you that this product does not have a Windows Digital Signature. Click "Yes" to continue.



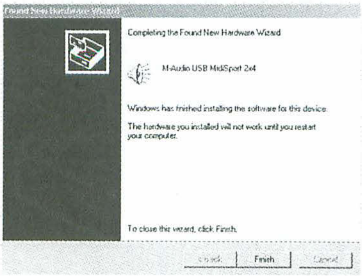
9. A dialog box will appear, stating that the installation has succeeded. Click "Finish" to complete the driver installation.



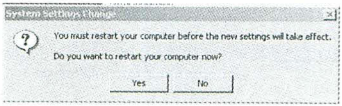
10. Plug the MIDISPORT into your computer's USB port. Upon doing so, the computer will find and install the necessary drivers.
11. The installer will warn you that this product does not have a Windows Digital Signature. Click "Yes" to continue.



12. The next screen informs you that the installer has completed. Click "Finish" to continue.



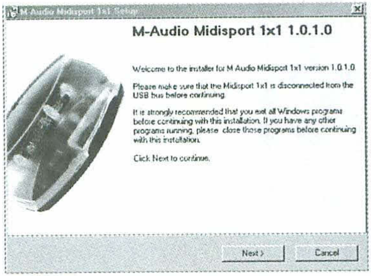
13. Windows 2000 will prompt you to restart the computer, in order to complete the installation. Click "Yes" to restart with new settings. Windows 2000 Installation is now complete.



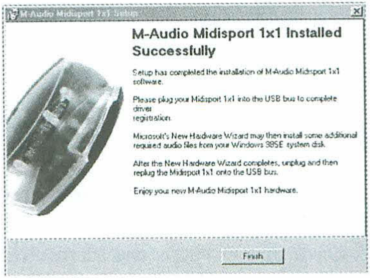
Windows Me and Windows 98

1. Insert the M-Audio Driver CD into your CD-ROM drive.
2. Open 'My Computer' or 'Windows Explorer' to locate your CD-ROM drive.
3. Double-click the CD-ROM drive that contains the M-Audio Drivers CD-ROM.
4. Double-click the MIDISPORT Folder to open it.
5. Double-click on the MIDISPORT Installer icon.
6. A dialog box will appear, reminding you to exit all currently running programs and to disconnect the MIDISPORT from the USB port. Do these things and click "Next" to continue. The installer will scan your hard drive and will then install the necessary files and perform setup actions on your system. A series of progress bars will show you how the

process is going (this can take some time).



7. A dialog box will appear, stating that the installation has succeeded. Click "Finish" to complete the driver installation.



8. Plug the MIDISPORT MIDI interface into your USB port. Upon doing so, the computer will find and install the necessary drivers. Windows Me or 98SE Installation is now complete.

Mac OS 9

This release version of the MIDISPORT driver requires Macintosh operating system OS 9.2.2. Some updates are offered free to Apple owners. Please check the Apple website at http://www.info.apple.com for update information.

After assuring that your system's operating system is up to the above specification, you must first install OMS, a MIDI management program developed by Opcode. This program is required to run the MIDISPORT on the Macintosh platform and it is important that it is installed before running the MIDISPORT Installer. We have included OMS on the CD for your convenience, and also offer it as a free download from our website.

Locate the OMS installer program on this CD in the OMS 2.3.8 folder, and simply double click its icon to install OMS. You will need to restart after installing OMS. Once this has been successfully completed, you can move on to the next step- the MIDISPORT Installer.

FIRST TIME INSTALLATIONS: If you power up your Mac with the MIDISPORT attached, you will receive a message that an "unknown USB device has been detected." Click OK and proceed with the driver installation. You may get a prompt to search for the drivers on the internet. You do NOT need to search for drivers on the internet as you already have the drivers CD.

Alternately (and recommended), you may also install the drivers first, and then plug in the MIDISPORT.

1. Insert the Driver Software CD. Open the MIDISPORT folder, then the USB folder. There you will find the MIDISPORT Installer program.
2. Run the MIDISPORT Installer by double clicking on it. This installs all of the MIDISPORT's extensions as well as the MIDISPORT OMS Driver. However, YOU MUST HAVE OMS INSTALLED FIRST BEFORE YOU RUN THIS INSTALLER PROGRAM. Otherwise, the MIDISPORT OMS Driver will not be placed in the OMS folder.

Once installed, you should have two new files: "M-Audio USB MIDI Support" in your Extensions folder and "M-Audio USB OMS Support" in the OMS folder, both of which reside in your System folder.

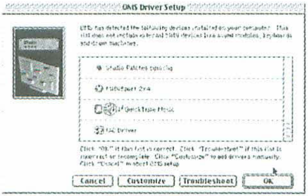
Go to the Chooser under the Apple Menu, and make sure AppleTalk is turned off (this is recommended, although OMS will sense that it is on and prompt you to turn it off). If you are installing your MIDISPORT driver and configuring OMS for the first time, follow these instructions to configure OMS.

First Time OMS Configuration Instructions

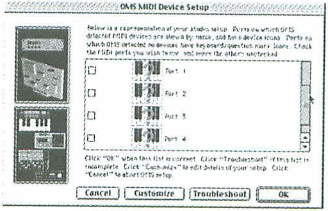
1. Make sure that the MIDISPORT interface is connected to the computer's USB port.
2. In the Opcode folder, which you will find on your hard drive, locate the OMS Applications folder, then OMS Setup. Double click on OMS Setup.
3. OMS will inform you that it has not yet been configured. Click OK.
4. The Create A New Studio Setup dialog box now appears. Click OK.
5. The "OMS Driver Search" box asks you to choose the port to which you've attached the MIDISPORT (either Modem or Printer). DO NOT choose a port (since we're using USB), just click "Search." OMS begins searching.

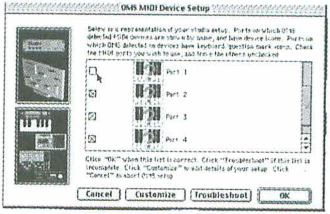
IMPORTANT: If the USB cable is not correctly hooked up to the MIDISPORT, or the MIDISPORT is not switched to USB mode, the setup will fail.

6. "OMS Driver Setup" shows the MIDISPORT in a list when OMS successfully finds the driver. Click OK. OMS will now define (shows "Identifying") the MIDISPORT output ports.

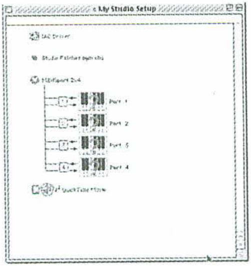


7. The "OMS MIDI Device Setup" dialog box will appear showing the MIDISPORT's output ports with an open check box to the left of each port. You will now have to check these open boxes to enable the output ports. Click on OK.





8. Next, the "My Studio Setup" appears with a File Save dialog box over it. You will now need to name (or you can use the default name) and save your new Studio Setup before you can assign instruments to the MIDISPORT's outputs. After assigning your instruments (this step optional) you are finished with OMS configuration and your MIDISPORT is ready for use.



You can run the OMS 'Test Studio" utility by going to the "Studio" menu and releasing the mouse on "Test Studio." Playing a note on your keyboard will give you an audio message from your computer, "MIDI received," while the arrow pointing away from the keyboard icon flashes. Clicking on a keyboard icon with the mouse pointer will send a tone cluster to the MIDISPORT's respective output port. The sound modules connected to the MIDISPORT's MIDI output ports should play the chord. You may also see the MIDI IN LED lights constantly flickering indicating some sort of MIDI activity, although no notes are being played. This is normal for most MIDI devices as the device is sending Active Sensing data to show users that a device is connected and working properly.

You may now exit OMS Setup by quitting the application. The rest must be configuration within your music software. Generally, this means selecting "OMS Compatibility," or "Open Music System" for your MIDI system setup.

Mac OS X

The drivers for Mac OS X are found on the Driver CD which comes with the product. You may also wish to check the MIDISPORT drivers page of our website to make sure you have the most recent version. The driver is labeled "MIDISPORT." The OSX Installer Package icon looks like 'a cube of Jello, rising out of a cardboard box and normally ends with the ".pkg" suffix.

To install the OSX driver:

1. Double-click on the installer package.
2. When prompted, enter your administrator password you chose when you installed OSX.
3. Follow the prompts to install the software.

Your MIDISPORT is ready for use. You can verify successful installation by going to the "Go" pull-down menu, Applications, Utilities, Audio/MIDI Setup, and clicking on the MIDI tab. Refer to the sections "Setting Up Your MIDI Studio" and "Using the MIDISPORT in your Application Software" for more information.

Hardware Installation

Installing your MIDISPORT involves simply attaching it to one of your computer's USB ports (or a USB hub) using the standard USB cable included. We recommend that you power down (turn off) your computer when attaching your MIDISPORT for the first time. Also prior to installation, you may want to verify that your computer's USB port is enabled (check your computer's users guide). If not, your computer will not recognize the MIDISPORT when it is plugged in.

Find a good spot around your computer station to place the MIDISPORT. The USB port on your computer is a small (1/8" x 3/8"), rectangular female connector and is usually found in a group of two. Take the male end of the USB cable that matches the size of your host computer's USB port and plug it into the USB port on the back of your computer. Take the other end of the USB cable and plug it in to the USB port on the back panel of the MIDISPORT. This male end of your USB cable is square (1/4" x 1/4") and should fit easily into the female USB connector on your MIDISPORT.

Description of Features

MIDI Input Jacks: Labeled "In", these 5-pin MIDI input jacks connect to the MIDI Outputs of your studio devices. The MIDISPORT has one to four of these jacks, depending on your model.

MIDI Output Jacks: Labeled "Out", these MIDI output jacks connect to the MIDI Inputs of your studio devices. The MIDISPORT has one to four of these jacks, depending on your model.

MIDI Indicator LEDs: These LEDs indicate MIDI activity on each of the MIDI inputs and outputs. There is one LED for each input and output on your MIDISPORT.

USB Connector: This jack connects the MIDISPORT to the host computer's USB port, using a standard USB cable (supplied).

USB Indicator LED: This light normally pulsates slowly and indicates that the MIDISPORT is in interface mode and is receiving power from the host computer.

USB/MIDI Thru Button: This switch is only found on the MIDISPORT 2x4 and MIDISPORT 2x2 models. It selects whether the MIDISPORT is in USB interface mode or MIDI Thru mode. When this button is In, the MIDISPORT functions as a MIDI interface. When this button is Out on the MIDISPORT 2x4, MIDI Input 1 is connected to MIDI Output 1 and 2, and MIDI Input 2 is connected to MIDI Output 3 and 4. When the switch is out on the MIDISPORT 2x2, Input A is routed to Output A and Input B is routed to Output B. This switch allows you to connect your synthesizers and synth modules even when your computer is switched off.

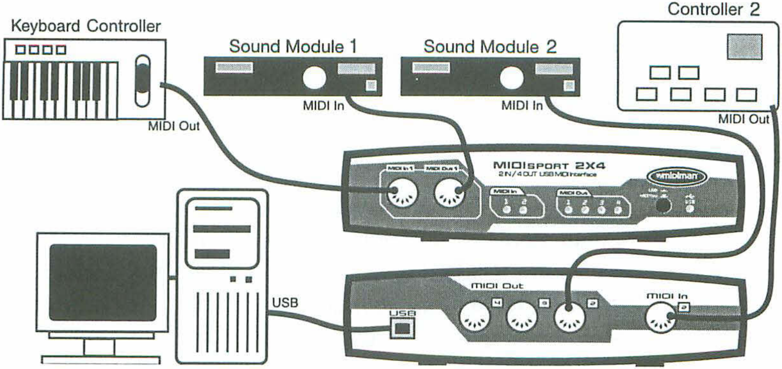
IMPORTANT: This button must be IN for the MIDISPORT to function as a MIDI interface.

Setting Up your MIDI Studio

A typical MIDI studio set-up would include your MIDISPORT, a computer, MIDI sequencing software, a MIDI controller keyboard and perhaps MIDI compatible sound modules.

The example which follows, and is shown in the diagram here, uses the MIDISPORT 2x4,

however all MIDISPORT interfaces can be set up in a similar manner.



This type of setup can be connected as follows:

1. The MIDISPORT is connected to the computer via the USB port connector using the supplied USB standard cable.
2. The MIDI Out of your controller keyboard is connected to Input 1 (or A) of the MIDISPORT.
3. Output 1 of the MIDISPORT is connected to the MIDI In of a sound module. (This can also be your MIDI controller keyboard if it is also serving as a sound module).
4. Output 2 through Output 4 are connected to additional sound modules.
5. The MIDI output of a second controller, such as drum pads or a wind controller, is connected to Input 2.

Your music software manages the routing of MIDI data to and from your computer. Proper installation of the MIDISPORT drivers will allow each of the MIDISPORT's ports to appear in any MIDI application.

One of the additional MIDI Inputs can also be used as a synchronization input, such as MIDI clock from a drum machine or MIDI Time Code from another sync source.

NOTE: When the USB/MIDI Thru switch is pressed to the OUT position ("MIDI Thru" mode), output from your controllers will go directly to the sound modules.

Passive (MIDI Thru) Mode

(This section only applies to the MIDISPORT 2x2 and MIDISPORT 2x4)

When your computer is switched off, or you are not using a MIDI application, you may still want to play your sound modules from the controller keyboard. Instead of repatching MIDI cables, you can use the USB/MIDI THRU switch on the front panel of the MIDISPORT 2x2 or 2x4. When this switch is in the Thru position, MIDI signals are passed from the inputs directly to the outputs. When your MIDISPORT is in "MIDI Thru" mode, it can not be used as a MIDI interface in conjunction with your computer.

The MIDISPORT "MIDI Thru" mode can be engaged in one of two instances:

1. When the MIDISPORT is not receiving power through USB, when the computer is turned off or the MIDISPORT is disconnected from the computer, and the USB/MIDI Thru button is set to the OUT position.
2. When the MIDISPORT is connected to and powered by the computer, and the USB/MIDI Thru button is set to the OUT position. If the user does this while power is applied to the MIDISPORT, the USB LED will blink on and off as an indication that the USB link to the computer has been disconnected.

When the USB/MIDI Thru button is in the OUT position, the unit will be in "passive" Thru Mode. The internal wiring of the MIDISPORT is hard wired for this routing scenario:

MIDISPORT 2x2:

- MIDI Input A is routed to MIDI Output A

- MIDI Input B is routed to MIDI Output B

MIDISPORT 2x4:

- MIDI Input 1 is routed to MIDI Outputs 1 and 2
- MIDI Input 2 is routed to MIDI Outputs 3 and 4

Using the MIDISPORT in your Application Software

Once the MIDISPORT driver has been installed, you will need to configure your MIDI application software to utilize the MIDISPORT. Every application does this a little differently, so we can only cover the basics here. On both Macs and PCs, most MIDI applications have a MIDI port configuration or MIDI settings dialog window. This window is usually titled something like "MIDI Devices" or "MIDI Setup." This is where you select your MIDI Input and Output settings. In Mac OS 9, it is necessary to configure your OMS Studio Setup as well.

After the MIDISPORT drivers are properly installed, the port selection will show each of the MIDISPORT's inputs and outputs. These inputs and outputs are numbered to correspond to the physical Inputs and Outputs of your MIDISPORT interface. Make sure that each of these inputs and outputs is highlighted or checked in the dialog box, in order for the ports to be enabled for use by the application.

Follow your MIDI sequencing program's operating instructions for setting up the rest of your MIDI studio. You may need to put your controller keyboard into "Local Off" mode, and the sequencer into "Keyboard Thru" mode. To play one of your synthesizers or modules from the sequencer, select the MIDI output that corresponds to that instrument. Again, check your sequencer's operating instructions for more details.

Technical Support & Contact Information

For additional help, contact M-Audio Technical Support by telephone (626-445-8495, 9-5 PST M-F), by fax (626-445-7564) or by e-mail (techsupt@m-audio.com).

Or, if you have any questions, comments or suggestions about this product, or any M-Audio product, we invite you to contact us directly, using the following information:

M-AUDIO U.S.
5795 martin Road
Irwindale, Ca 91706-6211
U.S.A.

Sales Information:	626-633-9050
Sales Information (email):	info@m-audio.com
Tech Support:	626-633-9055
Tech Support (email):	techsupt@m-audio.com
Fax:	626-633-9060
Internet Home Page:	http://www.m-audio.com

M-AUDIO U.K.
Unit 5, Saracen Industrial Estate
Mark Rd.
Hemel Hempstead, Herts HP2 7BJ
England

Sales Information:	44 (0) 144 241 6590
Sales Information (email):	info@maudio.co.uk
Technical Support:	44 (0) 871 717 7102
Tech Support (email):	richard@maudio.freeserve.co.uk
Fax:	44 (0) 144 224 6832
Internet Home Page:	http://www.maudio.co.uk

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